

Living Green: A Residential Watershed Pledge Program Influencing Behavioural Change to Reduce Non-Point Source Pollution

Areliia Werner

Living Green

Abstract

- To raise awareness of the environmental impacts of common practices around the home and how changes in behaviour can help to improve watershed health.
- To encourage changes in behaviour of residents of BC and the Yukon.

General Methodology:

- Living Green provides individuals with concrete examples of the simple changes that they can make in an attractive calendar, which is presented to them by members of their own community. Residents are asked to commit to changing their behaviour by taking a pledge.
- The Living Green calendar is a generic product that is transferable to communities in all regions of BC and the Yukon. Stewardship groups delivering Living Green are supported by the project's Regional Coordinator and by a guidebook that outlines various options for program design. Outreach materials including posters, brochures, and magnets are available for adaptation. Ongoing updates are made available through the website, www.livinggreen.ca, and a quarterly newsletter.

Results:

- The communities that have adopted Living Green and how they have applied the project to their specific situation will be discussed. The types of changes individuals are willing to commit to will be presented.

Conclusions:

- The effectiveness of Living Green in changing behaviour will be discussed.

Broader Implications:

- The potential for changes in mindsets sparked by Living Green will be illustrated.



The Challenge

A key objective of many local governments and stewardship groups is to promote sustainability within their community. Encouraging sustainable lifestyles addresses many facets of human activities and behaviour from energy consumption, to yard care, to vehicle maintenance, to water conservation. Educational programs designed to promote sustainability require a significant investment of both time and finances. More often than not, despite good intentions and demonstrated interest, communities have limited resources to apply towards this task. Even when these resources are available, it has been observed that educational materials on their own rarely impact behaviour. To build awareness, and induce change, these materials need to be combined with human interaction, and the same points have to be reiterated with different styles to appeal to peoples different belief systems. Living Green has been created to address this need.

Program Description

Living Green is based on the belief that the health of our natural environment is ultimately the responsibility of every individual. Focusing on the impacts of household waste products, water use, energy consumption, automobile emissions and yard care, the program provides residents with information on how to make simple changes in their daily practices, specifically in and around their home. The information is packaged in an attractive calendar, which is brought to residents by members of their own community. Beyond simply providing information, Living Green asks residents to commit to changing their behaviour by taking a pledge. The program emphasises the significant cumulative impact that individual actions have on the health of the watershed.

Goals

The goal of Living Green is to encourage citizens to make simple changes to the way that they do things in and around their home to reduce their impact on their watershed and maintain these changes over the long term. Living Green sets out to encourage individuals to transform information into action. The program provides stewardship groups with the tools and support they need to implement a watershed pledge program that addresses these behavioural changes. Living Green also promotes an increase in the general stewardship ethic of those communities in which it is delivered.

Objectives and Strategies

1. To raise awareness of the environmental impacts of common behaviours around the home and how changes in behaviour can help to improve watershed health	<ul style="list-style-type: none"> • Include in the pledge booklet a local watershed map and an explanation of the watershed concept • Highlight significance of cumulative effect of non-point source pollution. • Illustrate in the pledge booklet the specific effects of common behaviours (e.g. washing oils down storm-drains)
2. To encourage changes in behaviour relating to watershed health, in residents of BC and the Yukon	<ul style="list-style-type: none"> • Ensure that the recommended alternative behaviours are “do-able”. (i.e. not expensive, or overly demanding) • Present a reasonable number of alternative practices to choose from, but not too many to overwhelm residents • Provide incentives for “taking the pledge”
3. To distribute residential Best Management Practices information to stewardship groups who will deliver it in multiple regions across BC and the Yukon.	<ul style="list-style-type: none"> • Execute the communications/marketing strategy • Draw on the Habitat Conservation and Stewardship Program’s network of Stewardship Coordinators across BC for distributing the program
4. To provide resources and support to stewardship groups who take on the delivery of the program in their region	<ul style="list-style-type: none"> • Share the “Guide to Delivering Living Green in Your Community” which details the purpose, background, principles, steps to implementation, and various delivery options for the program within their specific community. • Offer a Pledge Booklet template, that presents Best Management Practices information in a non-threatening manner (simple language, inviting graphics), that can be easily adapted by stewardship groups, ensuring that local contacts details and community specific issues can be easily be added to the Pledge Booklet by delivery groups. • Have the Regional Coordinator provide initial planning, co-ordination, and implementation assistance to each community.
5. To build capacity in local communities	<ul style="list-style-type: none"> • Provide an avenue for stewardship groups to make landowner contacts and to raise awareness in the community. • Approach local business for support for the calendar production. • Offer local business contracts to produce incentive products for residents who take the Living Green Pledge.
6. To monitor and track the success of the program over time	<ul style="list-style-type: none"> • Add community progress to website which includes quarterly updates on the success of the program in various regions • Maintain regular contact with “delivery stewardship groups” • Evaluate Pledge Card statistics • Provide ‘Post Delivery Effectiveness Survey’

Development

Modelled after several similar programs initiated in recent years, including the Whatcom County Watershed Pledge Program, BCIT’s Watershed Pledge Program, and the Langley Environmental Almanac, Living Green has been crafted with the help of individuals from western Canada and parts of the US. The Living Green Working Group spent more than a year drafting the calendar contents, designing the graphics for advertising materials, and developing the generic program concept.

One of the most important aspects of the evolution of Living Green is its economy of scale. Developing a program such as this requires a tremendous investment of time and resources. Recognising this, the Living Green Working Group committed to designing a generic product that is transferable to communities across all regions of the province. Living Green is designed to be flexible in order to fit the needs of communities delivering the program.

In September 2001, the Living Green Program coordinator was hired by Community Futures Development Corporation of the North Fraser on behalf of the Living Green Working Group. The coordinator finalized the design for the Living Green calendar, created the Living Green website and display, wrote the Guide to Implementing Living Green in Your Community, and built a profile for the project by crafting and applying a Communications Plan. In August 2002, all program materials were in place, ready for those groups who wanted to initiate the delivery of Living Green in their communities.

Approach to Implementation

Living Green was made available for implementation in all communities across BC and the Yukon in August 2002. The initial approach was three-tiered: the Living Green Regional Coordinator passed the program information on to the Habitat Conservation and Stewardship Program (HCSP) Stewardship Coordinators and they acted as the link between the Living Green regional coordinator and the local groups that would deliver Living Green in various communities. As awareness of Living Green grew, other groups and agencies, such as the Girl Guides and school groups, delivered and expanded the influence of Living Green. Each community group that has delivered Living Green to date has adapted the generic program, customising their delivery to fit specific local needs, in accordance with available resources. The regional coordinator has provided support to, those groups that committed to delivering Living Green, referred to as delivery partners, guiding these deliveries to maintain continuity within the program.

Program Materials

A Guide to Implementing Living Green in Your Community is provided to all community delivery groups. It has three main components: the first section provides a background on the program; the second outlines key considerations for effective communication and various options for program design; and the third contains digital templates and graphics on CD-ROM. Outreach materials including posters, brochures, and magnets are available for adaptation. Additional resources and information are available through the project web site (www.livinggreen.ca) along with a quarterly newsletter. A Living Green display is available and is shipped at no charge to any interested party for use at conferences, workshops, and festivals.

A Social Marketing Approach

Living Green attempts to remove or address barriers that prevent individuals from making changes to reduce their impact on their watershed. Some barriers that present themselves intuitively in this area include individuals not knowing what they can do to reduce their impact, and concern that protecting the environment involves too much work and that the little amount that individuals invest won't make a difference. In response to these barriers, Living Green not only provides information on changes that can be made in households and why they should be made, it also encourages individuals to commit to making the simple changes suggested, by asking them to fill out and submit the Living Green Pledge Card. Pledge cards have been found to successfully encourage individuals to adopt and maintain behavioural change over the long term (McKenzie-Mohr 2001).

Living Green offers incentives to those who submit their pledge card. The Living Green quarterly newsletter and website offer interested individuals an opportunity to stay connected to the Living Green network. The Living Green concepts are reinforced with the quarterly newsletter, which provides a summary of the communities who are living green and supplies further green practices that can be adopted. The returned pledge cards provide information on the behaviours that individuals are willing to change, and on actions individuals are already taking. In addition, they also play an integral part in tracking the effectiveness of the program. Ongoing revisions of the program materials and adjustments to the program design will be made to increase Living Green's effectiveness. Information gathered through the pledge cards will help to guide this process.

The Living Green Calendar—Informational Material

Living Green has packaged all of its pertinent information for households into one concise, attractive calendar. A background on each topic is provided to give the individual an understanding of why their actions are important. Concrete examples of the specific actions individuals can take to reduce their impact on their watershed are outlined in the calendar. These actions are then followed up with contact details for agencies and community organizations where they can obtain further information.

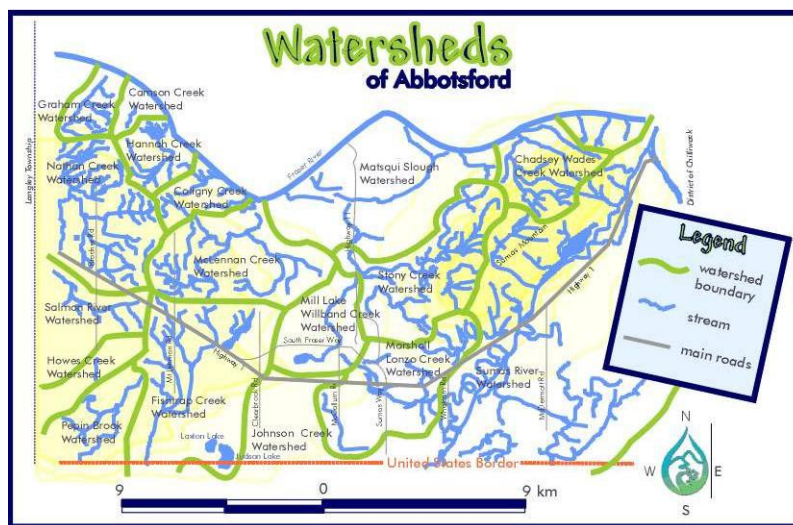


Figure 1. Abbotsford's Watershed Map. (Created by the Graphic Garden).

Topics addressed in the calendar include: protecting groundwater, reducing surface run-off, increasing infiltration, applying low impact yard care and pest control techniques, curbing household waste, cutting water consumption, practising regular vehicle maintenance, using alternative transportation methods, being energy wise, respecting existing habitat, and creating new habitat. The necessary facts surrounding prevalent myths are provided to give individuals the information they need to make educated decisions. As an example, the Living Green calendar points out that many storm drains are not connected to a wastewater treatment facility, therefore, the water they carry usually goes untreated before entering local waterways. It is further explained that when we allow water to pick up pollutants from our yards and carry them to storm drains this untreated water makes our waterways less suitable for fish habitat, or for human use. An activity that is suggested in the Living Green calendar to reduce the transport of sediments and pollutants into storm drains is to sweep driveways, sidewalks, and patios instead of hosing them off.

The Living Green Calendar—A Useful Product

To provide individuals with more than just another piece of informational material, Living Green has packaged all program information within an attractive and useful product, a calendar. The calendar is tailored to fit the community in which it is delivered. An area-specific watershed map, contact details for local agencies of interest, such as the Municipalities Environmental division or the emergency spills line, and facts and figures on the watershed in which Living Green is being delivered are included to make it relevant to the local community. The calendar design and eye opening graphics encourage households to put the calendar up on their wall where they will see it on a daily basis. The design discourages individuals from reading the information once, putting the calendar in their drawer, and forgetting about it. The Living Green calendar is unique because each calendar month is printed on an envelope. These envelopes provide a place for receipts to be filed throughout the month. At the end of the month, the envelopes can be taken down and filed for tax season. This functionality has been incorporated to make the Living Green calendar more attractive to those who are not normally interested in environmentally related matters.

The Living Green Calendar—Demonstrating Connectivity

Each Living Green calendar includes a map of the watershed in which it is delivered. The watershed map outlines major roadways and watershed boundaries. Looking at the map, an individual can estimate which watershed his or her home is located within, and which waterways are near their home. People then begin to understand that they live **IN** a watershed, which helps to demonstrate how water moving from the high points in the watershed to the lower points connects the actions that all individuals carry out in and around their homes to the health of their local waterways. See figure 1 below for an example of a watershed map provided in the Abbotsford Living Green calendar.

The Living Green Pledge Card

Living Green goes a step beyond traditional environmental education programs by asking households to commit to changing their behaviour by taking a pledge. Pledging individuals are asked to **adopt** and **maintain** new, more sustainable practices. Written commitments, such as those required when filling out a pledge card, have been found to increase the likelihood of an individual changing their behaviour significantly, and maintaining those changes over the long term:

“Obtaining a signed commitment increased curbside recycling in Salt Lake City, Utah, more than receiving a flyer, a telephone call or personal contact alone...Initially, the households who made either a verbal or written commitment recycled more newsprint than households who received only a pamphlet. However, only the households who committed themselves by signing the statement were still recycling when a follow-up was conducted (McKenzie-Mohr, 2001).”

Returned pledge cards help to establish a baseline of the current behaviour in each community and to measure the influence of Living Green on behavioural change. The pledge cards are part of Living Green’s monitoring and evaluation system. By evaluating the pledge cards received we will be able to assess the effectiveness of Living Green and of the different delivery methods applied.

Customizing for the Community

Living Green is designed to serve those who want to encourage behavioural change in their community towards improving watershed health. The effectiveness of the program depends heavily on the degree to which the delivering group tailors their delivery strategy to fit the needs of their community. Someone who has an understanding of the local area and a relationship with the people who live there will be better suited to delivering Living Green than someone from outside their community who has little understanding of pertinent issues or mindsets.

Living Green has been delivered in a variety of ways. From hosting the Living Green display at events to knocking on the door of new homeowners in a watershed, there is a wide spectrum of approaches that have been tested. Experience for other pledge programs has shown that residents are much more likely to take the pledge if a member of their community delivers the materials and explains the concept to them than if they get the package in the mail (City of Kelowna 2001). This community interaction is a good opportunity for stewardship groups to promote their efforts in their community to raise their profile. Prince Rupert, a small community in BC, published a story about Living Green in the local newspaper and requested individuals to write in and order a Living Green calendar if they were interested. Maple Ridge, a fast growing suburb of Vancouver, was better addressed by personal home visits where a Living Green package was left with the homeowner. The delivery in Maple Ridge was conducted by the Kanaka Educational and Environmental Partnership Society, a well-established stewardship group, who has a particular concern for streamside habitat lost on Kanaka Creek because of residential development on the creek.

Putting the Responsibility on to the Individuals

Living Green is founded on the philosophy that the health of our local environment is the responsibility of every individual in our community, taking the emphasis off large industry traditionally thought to create the majority of the environmental problems. Environment Canada echoes this notion. “Non-point sources of pollution—contaminated runoff from industrial, agricultural and urban sources such as lawns and gardens, commercial and hobby farms, motor vehicles, streets, parking lots, rooftops, onsite sewage systems, golf courses and construction projects—have become a greater danger to watercourses than point sources such as industrial outfalls” (The Green Lane™, Environment Canada, 1998).

Monitoring and Evaluation—Program Overview Description

The evaluation of this program was designed to address how successfully the program has been promoted and the extent to which the program has been adopted and delivered in communities in BC and the Yukon.

The following quantitative indicators were used to help evaluate the success of the Living Green Program:

- The extent of communications coverage (# of articles, radio broadcasts, community events attended).
- The extent of communities contacted (# of sample booklets/guidebooks distributed).
- The extent of communities visited, the completion of production (# of products created and distributed).
- The expressions of interest from community stewardship groups to deliver program locally.
- The extent of program adoption (# of communities in which the program is delivered).
- The number of pledge cards received, and the number of groups delivering Living Green.

Monitoring and Evaluation—Program Overview Results

Living Green has received extensive coverage across various mediums. A story entitled “Living Green Calendars Coming to Communities” was published in the February 2003 issue of “Fresh Outlook” magazine. A presentation of Living Green, made to Maple Ridge’s City Council, was broadcast on the local community television station. Including events like the Mission Showcase, the Return of the Salmon Festivals, the Annual General Meetings of various stewardship groups, and the David Suzuki’s Web of Life presentation, the Living Green display was hosted at, at least, 25 different events in the past year.

To date, Living Green information packages, including the “Guide to Implementing Living Green in Your Community”, were distributed to 15 Stewardship Coordinators across BC in the initial call for stewardship groups wanting to deliver Living Green. In each package four sample copies of the Living Green calendar were provided. Often the Stewardship coordinator would share the calendars with stewardship groups and the local municipality. Through the project website, eight more communities requested information on delivering Living Green. 15 more groups learned of Living Green at various events where the Living Green display was hosted or a presentation on Living Green was given. Groups in attendance at these events put other potential delivery groups in touch with the Living Green regional coordinator.

The Living Green regional coordinator travelled to 12 different communities to provide a presentation on Living Green or to host the Living Green display at local events. Roughly 40 groups expressed interest in potentially delivering Living Green in their community. Twelve groups have taken the lead on delivering Living Green in their community. Partnerships and support from other entities in each of these communities has contributed to these deliveries, increasing the total number of groups participating in these deliveries to roughly thirty.

To date, 9,500 copies of the Living Green calendar and 35 copies of the “Guide to Implementing Living Green in Your Community” have been have been printed and distributed. Additional copies of the guidebook have gone out electronically. Thus far 35 pledges have been received directly by the regional coordinator and those groups delivering Living Green have received 80 pledges. Roughly 600 more pledge cards are expected in the coming months by those groups who delivered their calendars recently.

Monitoring and Evaluation—Pledge Card Results

At this time it is still too early to fully assess the pledge cards. For five of the eight full-scale deliveries the deadline for returning pledge cards has not passed. Of the 2465 calendars that have gone out directly to residents to date about 100 pledge cards have been returned at this time - a 4% rate of return. Roughly 15 pledges have been submitted on line, via the Living Green website. An evaluation of the those cards that have been returned yields that the new practices that individuals are most likely to adopt is to use alternative cleaning products such as vinegar, baking soda, borax, or elbow grease. The new practice individuals are least likely to adopt is to (where possible) replace the paved surface around their home with vegetation or paving stones to increase the amount of water absorbed into the ground.

Other pledge programs like the City of Kelowna’s Living Greener program have found that the number of residents who applied the activities recommended in their calendar far exceeded the number of pledge cards received. In Kelowna’s case about 11,000 people kept the Living Greener calendar, but only about 220 of these registered their pledge (Schaad 2003). A phone survey conducted by the City of Kelowna found that all of the individuals who kept the calendar adopted some or all of the pledge items suggested (Schaad 2003). The most common reason given for not submitting pledge cards by those surveyed was that they were already doing the activities recommended by the calendar. It is felt that some of those surveyed gave this as a response because they wanted to appear more environmentally conscious for the purposes of this government-sponsored survey. The City of Kelowna may conduct further research to investigate the influence of the local government sponsorship of this program and survey on the survey response.

Monitoring and Evaluation—Program Close-up—Implementation Survey Description

In addition to quantitative evaluation of the above broad aspects of the provincial delivery of the Living Green program, the regional coordinator conducted a qualitative Living Green Implementation Survey with each of those groups who completed a full-scale delivery of Living Green.

This survey was designed to collect details on the approach groups took to conducting their deliveries in their communities, and the number of individuals potentially reached in their deliveries. The survey also gathered feedback on the project guidebook the “Guide to Implementing Living Green in Your Community,” the regional media campaign, the support provided to delivering groups by the regional coordinator, the Living Green calendar, and the design of the program.

Monitoring and Evaluation -Program Close-up - Implementation Survey Results

A table highlighting the key aspects of all of the Living Green deliveries conducted to date is given below, included are details on the groups involved in the delivery, the location of their delivery, a summary of the approach taken to the delivery, and the timing of the delivery.

Full-scale Deliveries

Langley Environmental Partnership Society and Abbotsford Land Trust Society	Abbotsford, BC, Salmon River Watershed	July and August 2002	98 residents contacted and received a Living Green calendar.
Approach			
Living Green (LG) was coupled with a landowner contact program. Two summer students were hired to travel to homes within the Upper Salmon River Watershed to deliver LG calendars and inform residents of available services. Services included property assessments where suggestions for improving habitat on an individual property would be given. The LG Coordinator conducted a half-day workshop with the students providing a background on Living Green, illustrating the steps involved in implementation, and reviewing suggestions for presenting the LG calendars. Residents of the watershed were invited to a workshop where the history of the Upper Salmon River watershed was given, and the LG coordinator made a presentation on Living Green.			
East Richmond Environmental Youth Corps (EYC)	Richmond, BC	August 2002	200 residents received a Living Green calendar.
Approach			
Living Green was coupled with environmental youth summer day camps. The LG Coordinator worked with 2 EYC coordinators and 3 EYC volunteers to create a LG workshop station. Children ages 6-12 participated in the camp, attended the LG station and received LG calendars, which they passed on to their parents/guardians.			
Cheam Liveable Communities Network (CLCN), Wood Duck Society, Green Legacies, Boy Scouts, Communities in Bloom.	Agassiz, BC	Started in Dec. 2002 and will continue over the next couple months.	500 Living Green calendars were created and 350 have been delivered at this time.
Approach			
The CLCN created a version of the LG calendar, which was printed in December 2002. Calendars were delivered through a number of avenues. The CLCN hosted the Living Green display at the Agassiz Christmas Craft fair. CLCN network members discussed the concept of Living Green with those who stopped at the display and gave calendars to those who were interested. A presentation on Living Green was given at the local library. Roughly 30 members of the community were in attendance at this event. The presentation included a background on Living Green and pictorial examples of important parts of the watershed and of the activities that can be adopted to reduce impact on the watershed. Calendars were then left with the Librarian for those who visited the library. Living Green was integrated into a program with local Boy Scouts. Through this program 180 Boy Scouts participated in a workshop where they learned about mason bees, bird boxes, and the activities they could adopt to preserve habitat for local species. Each scout took a Living Green calendar home with them to their parents or guardian, relaying to them the information they had gathered during the workshop.			
Baker Creek Enhancement Society (BCES), City of Quesnel.	Quesnel, BC	Starting October 2002, ongoing.	The BCES created 650 LG calendars, 270 have been delivered and the remainder will be delivered mid-April.
Approach			
The BCES provided calendars to those who visited the new Nature Education and Resource Centre in Quesnel. Special Events at the Centre have highlighted Living Green. The Calendars have also been integrated into in-class programs at schools. The City of Quesnel office is now delivering Living Green calendars in their own capacity also.			

The Kanaka Education and Environmental Partnership Society (KEEPS)	Maple Ridge, BC	Starting January 2003, ongoing	1000 LG calendars were created for KEEPS and 607 have been delivered.
--	-----------------	--------------------------------	---

Approach

KEEPS is taking a multi-pronged approach to delivering Living Green. They have created Living Green packages that include the Living Green calendar, brochures on KEEPS, and a map of the sensitive areas near Kanaka Creek. A presentation on Living Green was given to high school teachers from the district of Maple Ridge and from this presentation one teacher has taken Living Green and created a learning module that focuses on KEEPS' Living Green package. Students in this class will be required to write an essay on Living Green. Two elementary schools have adopted Living Green. In these schools certain teachers have committed to sending calendars home with students and are requesting that students complete the pledge card with their parents/guardians and return the pledge cards as a homework assignment. KEEPS volunteers have taken Living Green packages to a new subdivision in Maple Ridge, which backs on to Kanaka creek. When visiting the new homeowners, the volunteers highlighted the sensitivity of the nearby creek and pointed out activities they could adopt to reduce impact on the creek, leaving each household with the KEEPS Living Green package. A presentation was made to Maple Ridge city council on Living Green and all of the city counsellors have been asked to commit to Living Green by taking the Living Green pledge, to set an example for the people of Maple Ridge. The Living Green display and calendars will be a key part of KEEPS' presence at future community events and festivals relating to environmental awareness and education. Two articles about Living Green have gone out in the local newspaper. The presentation of Living Green to the City Council was taped and broadcast on the local community television station.

The Abbotsford Land Trust Society	Mill Lake, Abbotsford, BC	September 2002, ongoing	1100 Living Green calendars were created for ALTS.
-----------------------------------	---------------------------	-------------------------	--

Approach

Some of the calendars were delivered during the Rivers Day Celebration held at Mill Lake in September 2002 the remainder will be delivered through various events put on by the Abbotsford Land Trust Society. Volunteers to assist in the delivery have been recruited through the local newspaper.

Northern Vancouver Island Salmonid Enhancement Association	Port Hardy, BC	December 2002	50 LG calendars were delivered to Port Hardy.
--	----------------	---------------	---

Approach

The local Stewardship Coordinator published an article about Living Green in the local newspaper and requested that those who were interested contact her for a calendar. Some copies were shared with local schools and teachers.

Small-scale Deliveries

Living Green Coordinator and North Fraser Stewardship Coordinator	Mission, BC	January 2003	25 LG calendars were mailed out.
Approach			
The LG Coordinator hosted the LG display at the Celebration of Community event held in Mission in September 2002 and took names of those interested in receiving a LG calendar. Calendars were sent in the mail in January.			

Maple Creek Stream Keepers	Port Coquitlam, BC	August 2002	49 residents received a Living Green calendar.
Approach			
A workshop focused on illustrating the connection between daily activities we carry out, in our homes and in our yards, and the impact of these activities on local waterways was given. This was part of Junior Streamkeepers training attended by children age 7-10 in August 2002. The children took LG calendars home to their parents/guardians.			

Lillooet Watershed Council/ Lil'wat First Nations, local schools and municipality.	Mt. Currie, BC	September 2002	70 residents received a Living Green calendar at the festival and about 30 individuals received a calendar through, the local Stewardship Coordinator
Approach			
The LG coordinator hosted the LG display at the Mt. Currie Return of the Salmon festival. The Watershed Stewardship Coordinator for the area delivered the LG calendars to teachers and staff of the local municipality.			

Squamish Estuary Conservation Society	Squamish, BC	October 2002	70 residents received a LG calendar at the festival.
Approach			
The LG coordinator hosted the LG display at the Squamish Return of the Salmon festival and handed out LG calendars.			

The Guidebook (*The Guide to Implementing Living Green in Your Community*):

The majority of participants felt that the Guidebook contained lots of valuable information, but some felt that the Guidebook provided too much detail, making it almost overwhelming to use. The pictures and files supplied on the accompanying CD-ROM were thought to be very handy for presentations and workshops. Suggestions for additions to the digital files provided on the CD-ROM included more pictures of people doing the activities that are recommended in the Living Green calendar, diagrams and pictures of the key features of watersheds, and images of a watershed as seen from the air. Photos like those used by Smart Growth and computer simulations like those provided on the Institute for Resources and the Environment, of the University of British Columbia, Integrated Watershed CD-ROM would contribute to illustrating impacts of urbanization on watersheds and the value of green corridors.

Regional Media:

It was suggested that Living Green be publicized in more community newsletters. The BC Federation of Naturalists website and newsletter were considered to be ideal places to get the word out about Living Green in the future.

Support of regional coordinator:

The support provided by the regional coordinator was said to be sufficient for carrying out deliveries. Those groups surveyed did not require further support. However, the "Living Green Champion" for the Kanaka Environment and Education Partnership Society (KEEPS) recognised that Living Green could not have been delivered on the scale that it was delivered by KEEPS if they had not had some funding for their "Living Green Champion" position.

The Living Green Champion is the central point of contact for Living Green in their community. They are listed on local advertisements and in the calendars as the contact person for Living Green. This person takes on the responsibility of maintaining continuity between groups and individuals that are contributing to the delivery of Living Green in a community. The Living Green Champion for KEEPS also delivered a lot of the Living Green packages and did most of the work preparing the packages on her own. She also made various presentations to schools and councils to publicize and gain support for Living Green in Maple Ridge.

KEEPS received funding from the Pacific Salmon Foundation to support the “Living Green Champion” and to purchase incentives for those who take the pledge. KEEPS’ Champion felt that the KEEPS volunteers were already stretched so thin with all of their other KEEPS commitments that to ask any of them to commit to coordinating the delivery of Living Green on a volunteer basis would be too much to ask.

Living Green Calendar:

One group commented that “the information provided by the calendar was great,” and “that suggested behaviours were definitely actions that people were not already doing”. The calendar was said to provide a sufficient amount of detail. The behavioural changes or actions depicted in the calendar were thought to be realistic for people to adopt.

The informational sections in the calendar were described as being a bit too long. The background and myths and facts paragraphs in each section were thought to possibly distract people from the key point of the program—the actions people are being asked to adopt. The 10 different sections did not always seem to flow logically, with details in one section duplicating those things already touched on in another. Summarizing the information was recommended, perhaps by providing it in point form. Information on recycling should be added to the calendar, as this is an activity that not all people have adopted. Further suggested topics to address in the calendar include disposal of grass clippings, illegal dumping, and septic tank maintenance.

The calendar information is thought to be more pertinent to those in urbanized areas than to those in agricultural areas where issues like manure management and heavy pesticide use present more serious problems than those created by the individual in their home. In Maple Ridge apartments and townhouse complexes, are often found right next to streams and green spaces. Of all Maple Ridge streams, these streams tend to be the most likely to be vandalized. The information provided by Living Green on protecting stream habitat near these complexes is very important. It was also suggested that adding details on not throwing trash or other items into these streams would enhance the relevance of the materials to those living in these complexes.

The calendar language is currently thought to target adults who are responsible for the maintenance of their house or apartment, making the calendar not exceptionally suitable for children to put to use independently. The pledge card currently needs to be filled out by a parent or guardian to formalize a household’s commitment to adopting actions because most of the actions suggested are those, which adults are responsible for carrying out within a household. It is hoped that an altered version of the program could be developed to better target school-aged children. Creating a more child-friendly pledge card or an additional pledge card for children, may help to make the Living Green calendar more versatile.

Taking more steps to tailor the calendar to a specific community might make it speak more to those who are less concerned about the state of the environment. If the graphic that is on the front of the calendar could be replaced with an image that depicts the area where it is being delivered, it would feel “homier” and less generic.

Most individuals seemed to be sufficiently intrigued by the calendar/envelope idea to warrant the extra cost of producing the calendar on envelopes. The envelopes seem to encourage people to consider the Living Green calendar to be of value. It is difficult to separate the influence that the envelopes are having in encouraging those who are not environmentally conscious to look at the Living Green material from the influence that the Living Green calendar as a whole is having, including the informational booklet and its graphics. People are definitely interested in this envelope filling system, which they have not seen before in many other places. This type of functionality has not been overly exploited in BC.

Others who were surveyed felt that many individuals do not have a use for the envelopes because they do not have their own business, and therefore do not have a large number of receipts to file every month. Living Green might want to look into finding a product that more households would be able to take advantage of. Something that would remind individuals of Living Green at least 12 times a year, or once a month, would be ideal. If individuals are receiving the Living Green calendar at the beginning of the year they are likely getting calendars from many other sources at this time

making the Living Green calendar less unique. Perhaps a laminated calendar template that could be filled in and renewed each month, with an erasable pen, would be more useful to households than the envelopes and would definitely save a lot of paper. Also, because the envelopes are not as big as a regular size calendar they are thought to not be as useful for writing down dates and appointments as larger calendars can be.

The calendar/envelope sets present a challenge with delivery, because the months start going out of date after January, requiring them to be delivered prior to January for full use. If groups would like to have Living Green calendars on hand for events throughout the year they are presented with the issue of having to give out calendars that could have many months worth of expired envelopes. The calendar/envelope set is best put to use if the printing is completed in November and deliveries proceed in December and January. The sometimes-unpredictable funding cycles that most community groups work within makes printing in time for January delivery challenging.

Program Design:

It was reported that Living Green provided a great new avenue through which stewardship groups could interact with the members of their community. During this interaction they could engage the members of their community in a discussion of the environmental issues pertinent in their area. One group gained two members to their group while delivering Living Green.

It's hard to say if Living Green is reaching those who are not already interested in protecting their environment in some capacity. Sending the Living Green calendar home with school children seems to be one of the best ways to target those who are not environmentally conscious. People from a wide variety of backgrounds will be reached this way, as opposed to reaching only those who are likely already concerned about the state of the environment, such as those attending an environmental fair.

It is believed that Living Green is encouraging people to take knowledge and put it into action. Although Living Green was delivered only recently in some places, a noticeable change in attitude surrounding environmental consciousness is emerging within some communities. Within the schools where Living Green has been delivered, there is a significant change in attitude and a willingness to implement the suggested actions and to learn more.

In order for Living Green to be effective, it needs to be combined with an ongoing community outreach campaign. Those who are connected to the Living Green network should be encouraged to take further steps towards reducing their impact on their watershed. Invitations to participate in stream clean ups or to conduct landowner contacts should be made to get the community involved. The Living Green message should go out as often as possible to remind individuals of what they can do to protect their watershed, on an ongoing basis.

Future Directions

Ongoing follow ups will be conducted with groups delivering Living Green to review their pledge card statistics, and to record further efforts they have made with their deliveries. Those who have pledged to Living Green may be contacted to assess the influence of Living Green on encouraging these individuals to change their behaviour. The information gathered in the Implementation Survey will be used to guide program directions and objectives in the next funding cycle, where adjustments and additions will be made to the guidebook, CDROM, and calendar to increase their usefulness and versatility.

Living Green is very thankful for the generous support of:

- The Habitat Conservation and Stewardship Program
- Fisheries Renewal BC
- The Real Estate Foundation of BC
- Environment Canada's: Georgia Basin Ecosystem Initiative

References:

City of Kelwona, 2001, *A Pollution Prevention Program. Living Greener: Bringing the Environment Home Summary Report Fall 2001.*

The Green Lane™, Environment Canada, 1998, Preserving Clean Water, *News Releases*,
<http://www.ec.gc.ca/press/georgia4_b_e.htm> (website last updated August 25 2000).

McKenzie-Mohr, D., 2001, *Fostering Sustainable Behaviour: Community Based Social Marketing.*
<<http://www.cbsm.com>> (website last updated May 15, 2001).

Schaad, F., 2003, *Living Greener - Telephone Survey Report*, City of Kelowna, May 2003.